

## ABSTRACT

A twin-sheet thermoforming process for the manufacture of vehicle headliners. In the process a first sheet and second sheet of SuperLite material are mounted onto respective frames. The frames transfer the sheets into an oven, where they are heated to a desired temperature using IR. The first sheet is combined with a cover-stock material using compression molding forming a covered first headliner part. The covered first headliner part is then transferred to a second mold station. The second sheet is heated and then transferred from the oven to the second mold station where it is vacuum-formed on the upper half mold, forming a second headliner part. The upper and lower mold halves are pressed together fusing and sealing the first and second headliner parts into a unified part. The unified part is then unloaded and trimmed as necessary forming a headliner. The SuperLite material used to form the headliner is a sheet of low pressure, thermoformable, thermoplastic composite comprised of polypropylene and long chopped glass fibers.